Docket : <u>A.12-02-013</u>

Exhibit Number : <u>DRA-03</u> Commissioner : <u>Sandoval</u>

ALJ : Wilson

Witness : <u>Maricela Sierra</u>



DIVISION OF RATEPAYER ADVOCATES CALIFORNIA PUBLIC UTILITIES COMMISSION

Report on the Results of Operations for Bear Valley Electric Service Division General Rate Case Test Years 2013-2016

Sales, Customers, and Revenues

San Francisco, California July 27, 2012

TABLE OF CONTENTS

I.	INTRODUCTION	1
II.	SUMMARY OF RECOMMENDATIONS	1
III.	DISCUSSION/ANALYSIS OF SALES AND CUSTOMERS	2
	A. Sales	2
	B. Customers	4
IV.	DISCUSSION/ANALYSIS OF REVENUES	5
	A. Present Electric Revenue	5
	B. Base Rate Revenue	6
	C. Miscellaneous Revenues or Other Operating Revenues (OOR)	6
	D. Sales and Customer Forecast Workpapers	

1 BEAR VALLEY ELECTRIC SERVICE DIVISION SALES, CUSTOMERS, AND REVENUES

_	_						
つ			TD	$\mathbf{\alpha}$		\sim T	ION
1		117	IR		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		

4	This exhibit presents the Division of Ratepayer Advocates' (DRA) analyses
5	and recommendations regarding Bear Valley Electric Service Division (BVES) Sales
6	Customers, and Revenues forecasts for Test Years (TY) 2013-2016. DRA's
7	recommendations are based on its review of BVES' testimony, econometric models,
8	statistical analysis, data inputs, recorded data, data request responses and other
9	information provided by BVES.

II. SUMMARY OF RECOMMENDATIONS

The following summarizes DRA's recommendations on sales, customers and revenues for TY 2013-2016:

- DRA recommends that the Commission adopt BVES sales forecast for Test Years 2013-2016.
- DRA concludes that BVES' customer forecast for Test Years 2013-2016 is reasonable.
- DRA does not take issue with BVES' Revenues at present rates (2012), Miscellaneous Revenues or Other Operating Revenue (OOR).
 DRA recommends that the Commission adopt BVES' forecast for Test Years 2013-2016.
- In its next General Rate Case, DRA recommends that BVES be required to provide program statements, data files, and output files for all its equations in the initial work papers.

10

11

12

13

14

15

16

17

18

19

20

21

22

III. DISCUSSION/ANALYSIS OF SALES AND CUSTOMERS

1

2	A. Sales
3	DRA reviewed and analyzed BVES' electric use per customer model. The
4	variables in this model (e.g., heating and cooling degree days, monthly dummy
5	variables January to November, monthly unemployment rate for the San Bernardino
6	County, and a time trend to capture changes in market conditions) are part of the
7	use per customer model for TY 2013-2016. BVES did not provide a complete
8	statistical analysis, for example, no Durbin - Watson (DW) was calculated for any
9	BVES regressions.
10	BVES utilized Statistical Analysis System (SAS) to run its econometric model
11	for all rate classes to forecast use per customer for TY 2013-2016. BVES used 30-
12	year average of climate data in Heating Degree Days (HDD) and Cooling Degree
13	Days (CDD) and monthly recorded use per customer data from (January 1996) to
14	(October 2010).
15	DRA performed a regression analysis based upon data provided by BVES.
16	DRA used Econometric Views (E-Views) forecasting software to estimated use per
17	customer forecast for TY 2013-2016. DRA accepts BVES' use per customer
18	forecast, and recommends that the Commission adopt it for TY 2013-2016. Sales
19	by rate class (kWh) are shown in Table 3-1. ¹
20	BVES had proposed a Base Revenue Requirement Adjustment Mechanism
21	(BRRAM), which was authorized by the Commission in D.09-10-028 and D.09-10-
22	03-16. The BRRAM provides a symmetrical adjustment to revenues.
23	
24	

¹ See Ex. No. ____ BVES, Volume 2, Chapter 4 (Part A), page 36.

Table 3-1 BVES 2010 to 2016 Sales by Rate Class (kWh)

Rate Class	2010 Recorded	2011 Recorded	2012 Projected	2013 Projected	2014 Projected	2015 Projected	2016 Projected
D (Sgl Fam Res "SFR")	31,094,251	29,894,938	30,216,708	30,855,891	31,567,734	32,008,028	32,196,417
DE (Employees SFRs)	297,204	288,524	297,392	310,241	322,085	332,551	340,535
NEM (Net Energy)	96,754	85,484	85,484	85,484	85,484	85,484	85,484
D-All Electric (SFRs)	69,769	147,618	150,114	144,318	151,056	142,784	142,133
D (Life Support SFRs)	791,471	1,583,883	1,727,451	1,884,733	2,048,551	2,214,442	2,381,966
DLI (Low Income SFRs)	11,838,491	11,351,937	11,444,373	11,420,008	11,350,566	11,412,105	11,538,900
DM (Master Metered)	180,411	167,610	173,202	170,496	171,430	167,477	163,742
DMS (Submetered)	2,184,058	2,184,089	2,249,509	2,323,376	2,399,569	2,467,275	2,528,960
Perm Residential	46,552,409	45,704,083	46,344,233	47,194,547	48,096,475	48,830,146	49,378,137
Seasonal DO	29,586,663	29,351,450	29,762,330	30,652,750	31,605,155	32,189,705	32,496,389
Res Subtotal	76,139,072	75,055,533	76,106,563	77,847,297	79,701,630	81,019,851	81,874,526
A-1 Small (up to 20KW)	16,803,998	15,741,785	15,688,727	16,500,677	17,565,006	17,756,602	17,315,724
A-2 Medium (20-50KW)	10,233,005	10,148,320	10,693,519	11,582,105	12,566,747	13,233,076	13,663,504
A-3 Large (50-500KW)	12,269,003	11,151,470	11,736,233	12,452,538	13,192,720	13,863,791	14,448,042
A-4 TOU	5,100,050	6,844,653	7,135,759	7,664,974	8,234,063	8,555,158	8,723,142
Camp Oaks	137,185	135,230	135,230	135,230	135,230	135,230	135,230
Commercial	44,543,241	44,021,458	45,389,468	48,335,524	51,693,766	53,543,857	54,285,642
A-5 TOU sec	31,906	730,706	730,706	730,706	730,706	730,706	730,706
A5-TOU prim	11,297,884	12,209,790	12,230,085	12,299,478	12,376,494	12,402,195	12,396,678
Power	11,329,790	12,940,496	12,960,791	13,030,184	13,107,200	13,132,901	13,127,384
Street Ltg	191,852	191,852	191,852	191,852	191,852	191,852	191,852
TOTAL	132,203,955	132,209,339	134,648,674	139,404,857	144,694,448	147,888,461	149,479,404

B. Customers

DRA reviewed and analyzed BVES customer forecast and regression model based on (1) historical monthly data from the period 2006-2010, and (2) a simple time trend of customer growth to forecast customers for TY 2013-2016. DRA recommends that the Commission adopt BVES' customer forecast for TY 2013-2016. Table $3-2^{2}$ shows BVES' recorded number of customers for 2010 and BVES' forecast for 2011-2016.

BVES' customer forecast and the usage per customer forecast are used to estimate the total sales forecast for TY 2013-2016.

Table 3-2

BVES 2010 to 2016 Customer Forecast by Revenue Class

Component	2010 Recorded	2011 Estimated	2012 Estimated	2013 Estimated	2014 Estimated	2015 Estimated	2016 Estimated
Residential	21,349	21,503	21,635	21,762	21,890	22,019	22,151
Commercial	1,321	1,349	1,368	1,388	1,408	1,428	1,447
Power Street	4	4	4	4	4	4	4
Lighting	4	4	4	4	4	4	4
Total	22,678	22,860	23,011	23,158	23,306	23,455	23,606

² See Ex. No. ____ BVES, Volume 2, Chapter 4 (Part A), page 36.

IV. **DISCUSSION/ANALYSIS OF REVENUES**

A. Present Electric Revenue

DRA reviewed and analyzed BVES' revenues and accepts its estimates.

BVES developed revenue from sales using 2012 present rates and information

consistent with sales. Table $3-3^{3}$ shows BVES' revenues from sales of electricity by

revenue class at present rates through 2012.

7

1

2

3

4

5

6

8 Table 3-3 9

BVES 2010-2012 Total Supply Rate Revenue By Revenue Class (000)

10

RATE CLASS	2010 Re	corded	2011 Est	timated	2012 Est	imated
Residential (Permanent)	\$	4,724	\$	4,559	\$	4,629
CARE Discount	\$	231	\$	251	\$	243
Residential (Seasonal)	\$	4,768	\$	4,683	\$	4,749
Commercial	\$	5,609	\$	5,551	\$	5,712
Power	\$	1,115	\$	1,323	\$	1,325
Street lighting	\$	17	\$	15	\$	15
Total Electric Sales	\$	16,464	\$	16,383	\$	16,673
Other Operating Revenue	\$	-	\$	-	\$	-
Total Supply Revenue	\$	16,464	\$	16,383	\$	16,673

11

³ See Ex. No. ____ BVES, Volume 2, Chapter 4 (Part B), page 37.

B. Base Rate Revenue

DRA reviewed BVES' recorded base rate revenue and accepts its estimates. BVES' recorded and forecasted total base rate revenue by revenue class through 2012 is reflected in Table 3-4.

Table 3-4

BVES 2010-2012 Total Base Rate Revenue By Revenue Class (000)

RATE CLASS	2010 Recorded	2011 Estimated	2012 Estimated
Residential			
(Permanent)	\$3,753	\$4,253	\$4,341
CARE Discount	\$218	\$319	\$237
Residential (Seasonal)	\$5,576	\$6,066	\$6,162
Commercial	\$6,428	\$6,800	\$7,077
Power	\$805	\$1,067	\$1,088
Street lighting	\$103	\$98	\$96
Total Electric Sales	\$16,883	\$18,603	\$19,001
Other Operating Revenue	\$207	\$229	\$232
Total Base Revenue	\$17,089	\$18,354	\$19,233

C. Miscellaneous Revenues or Other Operating Revenues (OOR)

BVES' OOR for TY 2013-2016 is reflected in Table 3-5. OOR is comprised of fees and revenues for specific services that do not involve a charge for electricity. Miscellaneous revenues offset a portion of the revenue requirements necessary to provide services to BVES customers.

DRA reviewed the recorded OOR data and forecasting methods by category as illustrated in Table 3-5. BVES used five and three year historical averages to calculate for service establishment. The collection fee is \$8.00 and the forecast is based on a five year historical average. The returned check fee of \$10.00 per check is addressed in Volume 6, Propose Rates. The temporary service fee of \$75.00 is

⁴ See Ex. No. ____ BVES, Volume 2, Chapter 4 (Part B), page 38.

charged to offset hooking up the meter on a temporary pole and a \$15.00 clean and

show fee per application is charged to offset the cost. DRA recommends that the

Commission adopt BVES' forecast of Miscellaneous Revenues based on present

rates service fees for TY2013-2016 as illustrated on Table 3-5.5

5

2

3

4

Table 3-5

BVES Miscellaneous Revenues at Present Rates 2011-2016

8

7

Category	2011	2012	2013	2014	2015	2016
Service Establishment	\$39,705	\$40,842	\$41,978	\$43,115	\$44,251	\$45,388
Reconnect Fees	\$32,791	\$34,292	\$35,794	\$37,295	\$38,797	\$40,298
Collection/Notice Fees	\$56,824	\$56,824	\$56,824	\$56,824	\$56,824	\$56,824
Temp Serve & Clean/Show	\$3,901	\$3,992	\$4,083	\$4,174	\$4,264	\$4,355
Return Check Fee	\$0	\$0	\$0	\$0	\$0	\$0
Late Payment Fee	\$0	\$0	\$0	\$0	\$0	\$0
Other Miscellaneous	\$150	\$150	\$150	\$150	\$150	\$150
Added Facilities Charge	\$0	\$0	\$0	\$0	\$0	\$0
Joint Pole	\$95,629	\$95,629	\$95,629	\$95,629	\$95,629	\$95,629
TOTAL	\$229,000	\$231,729	\$234,458	\$237,186	\$239,915	\$242,644

9

D. Sales and Customer Forecast Workpapers

1213

14

15

16

17

18

19

11

BVES failed to provide a complete set of workpapers for its sales forecast.

DRA recommends that BVES include the following in its next GRC filing: (1) the forecasting software used, and (2) a list of its model variables including its

assumptions. For example, if SAS is used then include SAS file program

statements, SAS data files, and SAS output files for all its equations in the

workpapers. BVES failed to file a complete statistical analysis for all its equations.

DRA was able to obtain this data via data requests, but in the future BVES should

provide this data as part of the work papers filed with its application. Table 3-6

⁵ See Ex. No. ____ BVES, Volume 2, Chapter 4 (Part B), page 44.

- illustrates an example of a complete statistical analysis that should be included in
 the initial work papers.
- Table 3-6

 RATE D (Sgl Fam Res "SFR")

 TIER 1

	Coefficient	Std. Error	t-Statistic	Prob.	
С	289.1149	3.053915	94.67026	0.0000	
HDD	0.004656	0.003215	1.448329	0.1493	
CDD	0.021269	0.028257	0.752721	0.4526	
TIME	-0.026409	0.006506	-4.059214	0.0001	
UNEMP	-1.065450	0.110829	-9.613444	0.0000	
JANUARY	4.622081	1.315093	3.514642	0.0006	
FEBRUARY	-3.583565	1.335580	-2.683152	0.0080	
MARCH	-1.042426	1.375000	-0.758128	0.4494	
APRIL	-8.075355	1.602558	-5.039041	0.0000	
MAY	-7.348742	2.184069	-3.364702	0.0009	
JUNE	-10.55757	2.742337	-3.849843	0.0002	
JULY	-7.280260	3.451145	-2.109520	0.0363	
AUGUST	-7.719362	3.145266	-2.454279	0.0151	
SEPTEMBER	-8.872528	2.679466	-3.311305	0.0011	
OCTOBER	-3.015961	1.937055	-1.556982	0.1213	
NOVEMBER	-0.802773	1.502156	-0.534414	0.5937	
R-squared	0.800793	Mean depende	nt var	276.7979	
Adjusted R-squared	0.783815	S.D. dependent		7.993224	
S.E. of regression 3.716509		Akaike info crite	5.543102		
Sum squared resid	_		Schwarz criterion		
Log likelihood			criter.	5.653044	
F-statistic	47.16673	Durbin-Watson	1.418066		
Prob(F-statistic)	0.000000				